

Weather Note

RAPID PRESSURE VARIATIONS IN ICELAND

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In the "Weather Note", *Monthly Weather Review*, January 1960 an unusual pressure rise at Yakutat is described [1]. As the note asked for information about similar or larger pressure rises, I want to give a brief description of an unusual cyclone with rapid pressure variations that struck the east coast of Iceland on January 25, 1949. This cyclone had a central pressure of about 940 mb., its radius was approximately 200 km., and it moved with a velocity of about 70 km./hr., N. 15° E.

The most rapid pressure variations occurred at Dalatangi, where the following pressure observations were made:

| Sea level pressure | |
|----------------------|-----------|
| January 25, 0900 GMT | 977.8 mb. |
| 1200 | 973.7 |
| 1500 | 963.0 |
| 1800 | 952.5 |
| 2100 | 975.6 |
| 2400 | 981.7 |

maximum fall in 3 hours was 26 mb. The maximum pressure rise in 1 hour was from 941.5 mb. at 1740 GMT to 960.5 mb. at 1840 GMT, or 19 mb. The maximum pressure rise in 3 hours was 33 mb.

The barograph trace made at Hölar, Southeast Iceland, was very similar to that at Dalatangi with minimum pressure of 947 mb. and maximum pressure rise of 18 mb. in 1 hour.

Pressure rises of similar magnitude as that described in [1] have been observed several times at Icelandic weather stations. Three examples observed in Reykjavik during the last 12 years are:

| | 1-hour pressure rise | 3-hour pressure rise |
|------------------|----------------------|----------------------|
| January 22, 1950 | 12 mb. | 20 mb. |
| January 5, 1952 | 7 | 18 |
| March 8, 1953 | 9 | 19 |

REFERENCE

1. Mac A. Emerson, "Pressure Rise at Yakutat, December 18, 1959," *Weather Note, Monthly Weather Review*, vol. 88, No. 1, January 1960, p. 18.

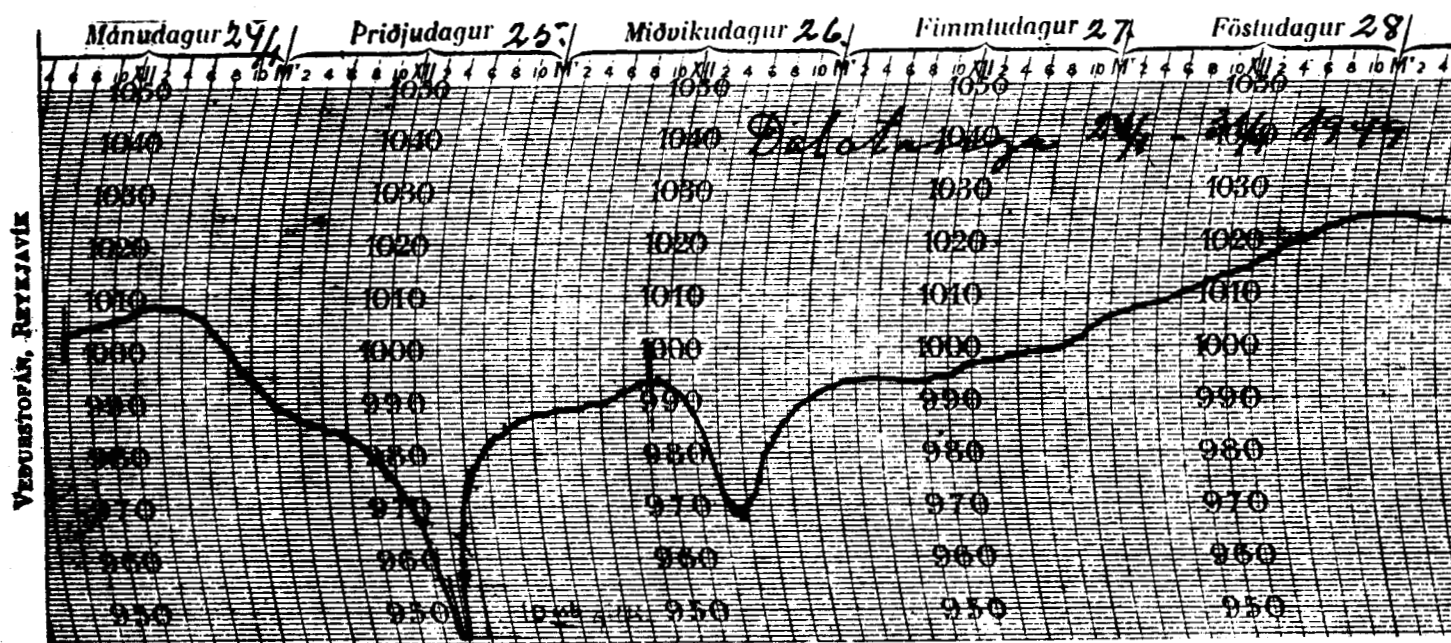


FIGURE 1.—Photocopy of section of barograph trace made at Dalatangi, Iceland, January 24-31, 1949.